

TITLE 62: MINING
CHAPTER I: DEPARTMENT OF NATURAL RESOURCES

PART 240
THE ILLINOIS OIL AND GAS ACT

SUBPART G: WELL CONSTRUCTION, OPERATING AND
REPORTING REQUIREMENTS FOR CLASS II UIC WELLS

**Section 240.796 Operating and Reporting Requirements, Hydraulic Fracturing
Operations, Seismicity**

a) Applicability

This Section applies to all Class II UIC disposal wells that inject any Class II fluids or hydraulic fracturing flowback from a high volume horizontal hydraulic fracturing operation permitted by the Department under the Hydraulic Fracturing Regulatory Act [225 ILCS 732]. This Section does not apply to Class II UIC wells used for enhanced oil recovery operations.

b) Definitions

For purposes of this Section, the terms defined in 62 Ill. Adm. Code 245.110 have the same meanings when used in this Section. Additionally, the following terms have the meanings ascribed in this subsection:

"Green Light Alert" means the Department received notice from either USGS or ISGS that there was an earthquake in Illinois with a magnitude less than 2.0.

"Induced Seismicity" means an earthquake event that is felt, recorded by the national seismic network, and attributable to a Class II UIC well used for disposal of flowback and produced fluid from high volume horizontal hydraulic fracturing operations. (Section 1-96(a) of the Hydraulic Fracturing Regulatory Act)

"ISGS" means Illinois State Geological Survey.

"Red Light Alert" means the Department received notice from either USGS or ISGS that there was an earthquake in Illinois or a bordering state with a magnitude of 4.0 or greater.

"USGS" means United States Geological Survey.

"Yellow Light Alert" means the Department received notice from either USGS or ISGS that there was an earthquake in Illinois or a bordering state with a magnitude of at least 2.0, but less than 4.0.

c) Class II UIC Well Operations

- 1) All Class II UIC wells regulated by this Section shall be equipped with a flow meter capable of monitoring the rate of flow of fluids injected down into the well on a per day basis consistent with the Class II UIC permit issued by the Department.

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- 2) All permittees shall record and maintain pressure and flow data for each Class II UIC well on a monthly basis. The report shall include the average and maximum monthly injection rates and pressures. The records shall be submitted to the Department in accordance with Section 240.780(e). The records shall be maintained for at least 5 years and shall be available to the Department for inspection upon request.

- 3) When a well is suspected of triggering induced seismic activity, the permittee shall consult with the Department and ISGS to develop a plan for seismic monitoring, including the possibility of installing monitoring stations in the vicinity of the well and reduction in rate or pressures of fluid injected.

d) Induced Seismicity Reporting

- 1) The Department will report any Yellow Light Alert to all Class II UIC well permittees with wells located within a 6-mile radius of the earthquake event's epicenter measured from the surface above the hypocenter.
- 2) After receiving a Yellow Light Alert, a Class II UIC well permittee has the discretion to operate the permitted well according to the terms of the permit, adjust the operation of the permitted well reducing the volume of fluids injected into the well, and consult with the Department and ISGS about the implications of the Yellow Light Alert as it relates to the operation of the well.
- 32) After receiving a third Yellow Light Alert within one year, a Class II UIC well permittee must immediately reduce injection volume and consult with the Department and the ISGS.
- 4) The Department will report any Red Light Alert to all Class II UIC well permittees with wells located within a 10-mile radius of the earthquake event's epicenter measured from the surface above the hypocenter.

e) Induced Seismicity Cessation Orders

The Department shall issue orders to permittees of Class II UIC wells for the immediate cessation of operations due to conditions that create imminent danger to the health and safety of the public, or significant damage to property, pursuant

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to Section 19.1 of the Oil and Gas Act and 62 Ill. Adm. Code 246.186, under any of the following conditions:

- 1) If a particular well regulated by this Section receives a third Yellow Light Alert and within the last year the same permittee received a Notice of Violation for the same well related to flow, pressure or mechanical integrity;
 - 2) If a particular well regulated by this Section receives any number of Yellow Light Alerts and there is confirmed property damage to any building or structure as a result of the earthquake event with a magnitude greater than 4.5. The confirmation can be performed by personnel from the Department or personnel from any local, state or federal agency;
 - 3) If a particular well regulated by this Section receives a fifth Yellow Light Alert; or
 - 4) If a particular well regulated by this Section receives a Red Light Alert and is within 6 miles of the epicenter of the earthquake event measured from the surface above the hypocenter.
- f) The Department has discretion to issue cessation orders to permittees with wells regulated by this Section within 10 miles of any earthquake epicenter, when necessary, if, after consultation with ISGS, induced seismicity conditions warrant cessation.
- g) Induced Seismicity Mitigation Requirements
- 1) After receiving a cessation order, in addition to the requirements of the order, the permittee shall schedule a meeting with the Department and representatives of ISGS at the Department's Headquarters, One Natural Resources Way, Springfield, Illinois, to be held within 30 calendar days after issuance of the order and before the cessation order hearing. Once scheduled, the permittee shall confirm the meeting in writing to both the Department and ISGS and provide the last 6 months of well data required in subsection (c)(2) to help facilitate the meeting. The purpose of the meeting will be to determine possible ways to mitigate induced seismicity events near the permitted well.

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- 2) If the permittee and Department, in consultation with ISGS, reach agreement on how to test induced seismicity mitigation, the Department shall present the agreement as a settlement before the Hearing Officer for the cessation order hearing (see Section 240.186(d)).
- h) Enforcement
Penalties for administrative and operating violations are specified in Section 240.160(c). Violations under this Section are classified as administrative or operating, as follows:
 - 1) Failure to comply with any portion of subsection (c)(2) related to records is an administrative violation.
 - 2) Failure to schedule and attend a meeting within 30 days after the issuance of a cessation order is an administrative violation.
 - 3) Failure to install a flow meter, or maintain a flow meter in operating condition, is an operating violation.
 - 4) Failure to cease operations after a cessation order is issued by the Department is an operating violation.
 - 5) Failure to comply with an induced seismicity mitigation agreement is an operating violation.

(Source: Added at 38 Ill. Reg._____, effective_____)